Responses to Additional Web Conference Questions
A National Web Conference, E-Prescribing and Medication Management: Current Realities and Future Directions
Agency for Healthcare Research and Quality (AHRQ)
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Questions for both presenters:

Q: I have spoken with physicians who claim that e-prescribing is not saving them time, is this actual or short term and based on the learning curve? Have others heard this complaint in managing compliance?

A (Dr. Fischer): If systems are not designed to operate well in the workflow of the physician's office, then the potential efficiencies of e-prescribing are unlikely to be realized and physicians will be prone to abandon the use of e-prescribing. It is for this reason that continued research on what works – and just as important what does not work – in e-prescribing systems is so important.

A (Dr. Carrow): Preliminary results from the survey highlighted in Slides 42 and 43 indicate:

> About 25% of respondents felt electronic prescribing of controlled substances (EPCS) would cause a learning curve that would be disruptive to their practices.
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> That 89% felt EPCS would either improve (63.4%) or not affect (25.6%) workflow and efficiency of practice.
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> That 37% report that the e-prescribing system was unreliable more than twice in past six months (system crashes).
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> That 48% report that pharmacy did not receive prescription in a timely manner more than six times in the past six months (i.e., by the time patient was ready to pick up, the prescription had not arrived).
>
> That 35% report that pharmacy called to confirm info on electronically sent prescription more than 6 times in the past six months (e.g., sig and free text not consistent).

Q: How is e-prescribing defined versus computer medication order entry? Is there a difference?

A (Dr. Fischer): Computerized order entry has generally been used to describe medication ordering for inpatients, but the general principles and elements should be similar.

A (Dr. Carrow): Computerized prescriber order entry (CPOE) generally refers to electronic transmission of prescriptions within the closed system of a local area network in an institutional (hospital or clinic) setting. E-prescribing is generally used to refer to electronic transmission of prescriptions in the ambulatory care setting.

Questions for Dr. Fischer:

Q: Are you aware of any research regarding the use of e-prescribing for an inpatient's discharge medications?

A: Some hospital order entry systems do allow for the e-prescribing of discharge medications. There are also some recent projects working on systems for pre- and post-discharge medication reconciliation. However I am not aware of published research documenting the efficacy of these programs.

Q: What are some things that are being done to help with "prescriber screen fatigue" when receiving a bunch of alerts when e-prescribing?

A: There is work being done on improving the clinical relevance of alerts to decrease alert fatigue, the 2006 paper by Shah and colleagues (see annotated bibliography) shows promising findings from this approach, which needs to be extended to other settings.

Q: What patient education materials and processes will help improve ambulatory e-prescribing safety?

A: There are considerable efforts now underway to improve the comprehensibility of the information provided with prescriptions, to the extent that this kind of information can be provided electronically in a manner that is easy for patients to use it could offer promise for improving safety.

Q: Has there been any research done regarding interoperability between drug knowledge vendors? For example: Electronic health record using Medi-Span and e-prescribing solution using First Databank (FDB). How can the match between these disparate databases be addressed?

A: This is a very important topic, but I am not aware of published research demonstrating such interoperability.

Q: The meaningful use objectives approved by the Office of the National Coordinator for Health Information Technology (ONCHIT) calls for a "retrieve and act on" objective. How do you think physicians and pharmacists will increase adherence?

A: Retrieving information on adherence should offer a chance for physicians and pharmacists to educate patients on proper medication use and adjust medication regimens if current regimens are creating adherence problems.

Q: E-Prescribing seems like a win/win for payers, public, patients, providers? What about pharmaceutical companies? How can they get involved, play in the space, benefit?

A: Pharmaceutical companies benefit from increased medication adherence, so if e-prescribing systems can support interventions to improve adherence, that is likely to be helpful for pharmaceutical companies. However, for the systems to be usable for prescribers they need to address all medications, not just those made by an individual company.

Q: Can the banking industry be looked to for all the security elements you mentioned?

A: I am not conversant with the security elements used in banking, but the basic principle of interoperability across multiple systems that allows patients to withdraw money securely from ATMs (automatic teller machines) all over the world seems likely to have some applications for health information technology and e-prescribing.

Q: How do you see patient data-entry of meds (over the counter medications, herbals, from other prescribers) in the reconciliation of med lists and related patient safety?

A: This is an important element that has not been emphasized in systems to date, further work in this area will be beneficial.

Q: Can you please comment on the proliferation all e-prescribing vendors. Seems like there are over 200 with different interfaces, different levels of information presented, lack of standards, etc. Is this a good thing or bad thing for the industry? Consolidation in the future?

A: Many vendors offer the potential for great innovation.

Q: Will there be any difference in the e-scribing for hospitalists versus primary care physicians, since one is ongoing and one is short term direction for the patient?

A: Hospitalists are more likely to use hospital-based computerized order entry systems to choose medications for inpatients, while outpatient prescribers will generally use e-prescribing systems with the ability to transmit prescriptions electronically to pharmacies or pharmacy benefit management companies (PBM).

Questions for Dr. Carrow:

Q: Do you anticipate a need for token identification on behalf of the pharmacy's filling prescriptions?

A: Our understanding of the DEA's (Drug Enforcement Administration) Notice of Proposed Rulemaking (NPRM) is that the pharmacy or pharmacy system would not be required to have a hard token. It remains to be seen what the requirement will be in the final rule from the DEA.

Q: Are you in communication with Certification Commission for Health Information Technology (CCHIT), the regulator of e-prescribing vendors of point-of-care e-prescribing for providers? I feel they are so detached from the medical field and do not have ANY or limited members of the healthcare field on their team.

A: Please see CCHIT board member list at www.cchit.org/about/commission.

Q: Is the DEA considering biometrics as an alternative to a token for signing the prescription?

A: Our reading of the DEA's Notice of Proposed Rulemaking indicates that the DEA does not propose allowing the use of biometrics as an alternative to a hard token for signing the prescription. Rather, the NPRM proposes that a biometric may be used in lieu of a password for activating a hard token. It remains to be seen what the requirement will be in the final rule from DEA.

Q: State pharmacy laws sometimes do not mention e-prescribing or include regulations that contradict regulations for e-prescribing (e.g., some states require handwritten directions for some drugs or drug interchange). What can be done to better align the law?

A: Much of the national focus to date has been on the federal requirements, however, more focus is needed at the state level (see slide 44). In this regard, the project team has been working with national organizations representing the states to alert them to the need to consider changing or preparing to change state laws and regulations as appropriate.